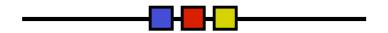
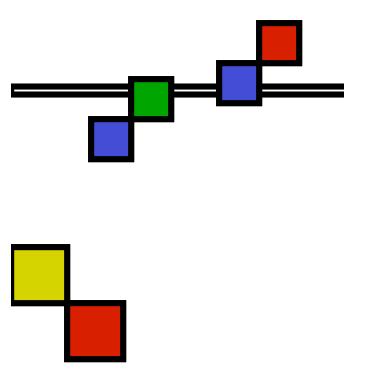
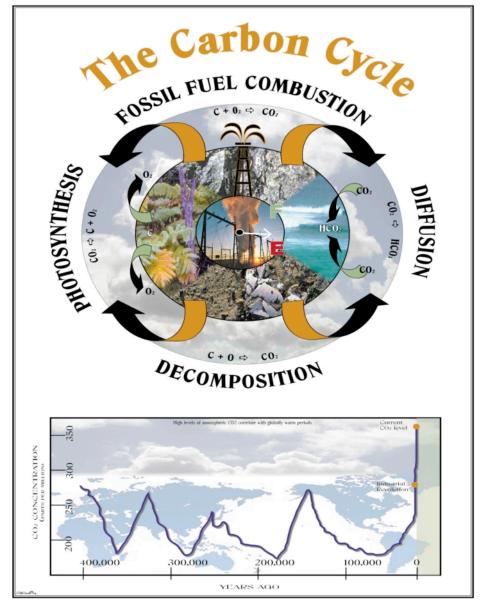


## The DOUGLAS Environmental Plan for State Government

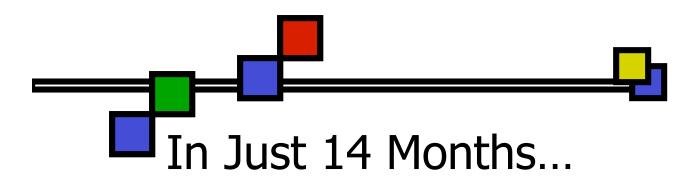


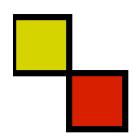
Thomas W. Torti
Commissioner
Department of Buildings and General Services







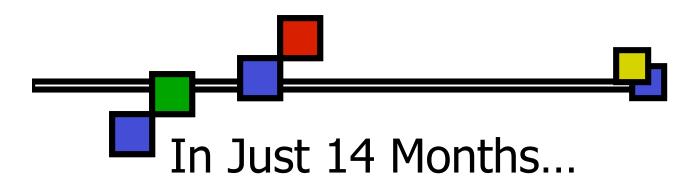




The State of Vermont developed a Comprehensive Plan to:

 Reduce Environmental Impact of State Government

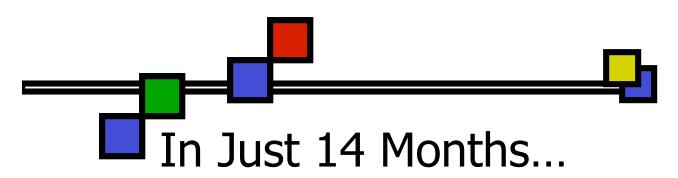
- ₽
- Save Operations Revenue thru Energy Savings
- Create Market Demand for Environmentally Preferable Products (Especially Vermont Products)
- Demonstrate that Fiscal Responsibility and Environmental Stewardship Go Hand in Hand



Defined Three (3) Target Areas of Greatest Influence

- Management of State Facility Infrastructure
- State Purchasing
- Transportation Management thru
  - Comprehensive Legislation
  - Updated Executive Orders
  - A Comprehensive Energy and GHG Reduction Policy





#### **STATE PURCHASING**

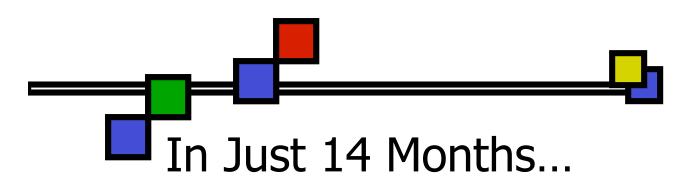
- Identified Contracts with an Environmental Marker
- Established Annual Review for "Environmental" Products
- Expanded Suppliers of Chlorine-Free Paper
- Revised and Updated Green Cleaning Supply Products
- Expanded Closed-Loop Purchasing Contracts
  - Information Centers

#### **Market Development**

- Preference for Vermont Water Struck Brick
- Preference for Vermont Stone Product
- Preference for Vermont Wood Produced from Sustainably Managed Forests

#### **Proposed Legislation to:**

- Transferred responsibility for Price Factor/Life Cycle Analysis to the Department of Buildings and General Services
- Increase Recycled Price Preference from 5% 10%
- Increase use of Recycled Products 40% by 2008



#### TRANSPORTATION MANAGMENT

#### **Demand Management**

- Link Express (CMAQ Grant)
- MPO Transit Funding Task
   Force
- Developing Work Site based Video Conferencing (DII and BGS)
- Exploring a Montpelier Waterbury Shuttle
- Incorporating "Ride Share" into the State Fleet Program

#### TRANSPORTATION EFFICIENCY

- Established Fleet Management Program
  - Alternative Fuel Vehicles
    - Right Sizing Fleet
    - Ride Share



- Fuel Switching
  - Bio Diesel
  - Electric car for Security Workers



# In Just 14 Months...

#### **LEGISLATION**

#### **Capital Bill**

- Requires new state government Energy Plan by 6/30/05
- Requires Monitoring of Energy Resources used
- Requires Strategy to Reduce Fuel Consumption and GHF Emissions
- Requires Purchase based on Life Cycle and Environmental Considerations
- Requires the use of Highest Practical Energy Systems in all new construction and major renovations
- Requires future Capital Budgets to address Energy Issues
- Includes \$1 Million Request
  - Waterbury Improvements
  - Energy Measurement in Montpelier

#### **Big Bill - Capital Bill**

Clean and Clear Programs

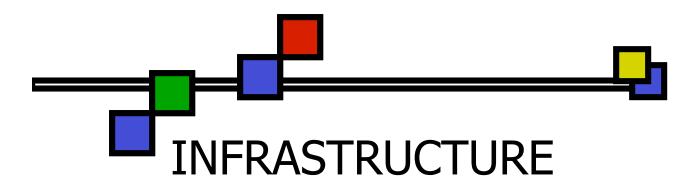
#### **Executive Orders**

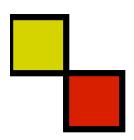
- Climate Change Action Plan
- Clean State Program

#### **Policy – Procedures**

- Transfer Environmental Coordinator to BGS
- State's CREMP



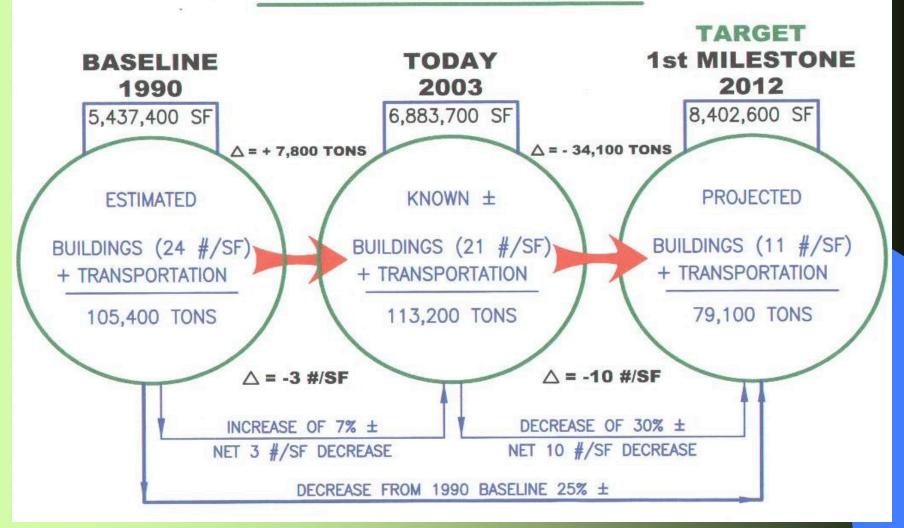




- Quantified Electric and Thermal Use by State Government
- Developed GHG Reduction Goals and Strategies
  - New Buildings to be 30% more efficient than code
  - Sustainable Sites
  - Energy Control Devices
  - Biomass and Co-generation Preference
  - Water Use/Consumption
  - Emissions: Noise-Light-Particulate



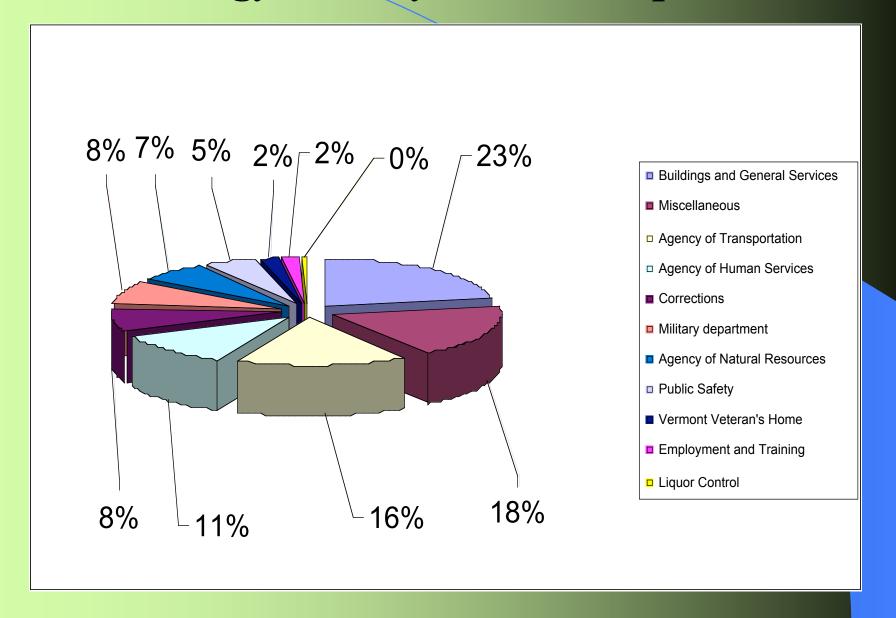
## GREENHOUSE GAS EMISSIONS STRATEGY



## Total Energy Cost by User Group - FY'03

		Percent of
User Group	<b>Energy Costs</b>	Total
Buildings and General Services	\$4,444,806	23%
Miscellaneous	\$3,562,845	18%
Agency of Transportation	\$3,205,599	16%
Agency of Human Services	\$2,252,823	11%
Corrections	\$1,640,988	8%
Military Department	\$1,536,885	8%
Agency of Natural Resources	\$1,324,263	7%
Public Safety	\$990,681	5%
Vermont Veteran's Home	\$342,122	2%
Employment and Training	\$334,618	2%
Liquor Control	\$98,433	0.5%
Total	\$19,734,063	100%

### Total Energy Cost by User Group - FY'03



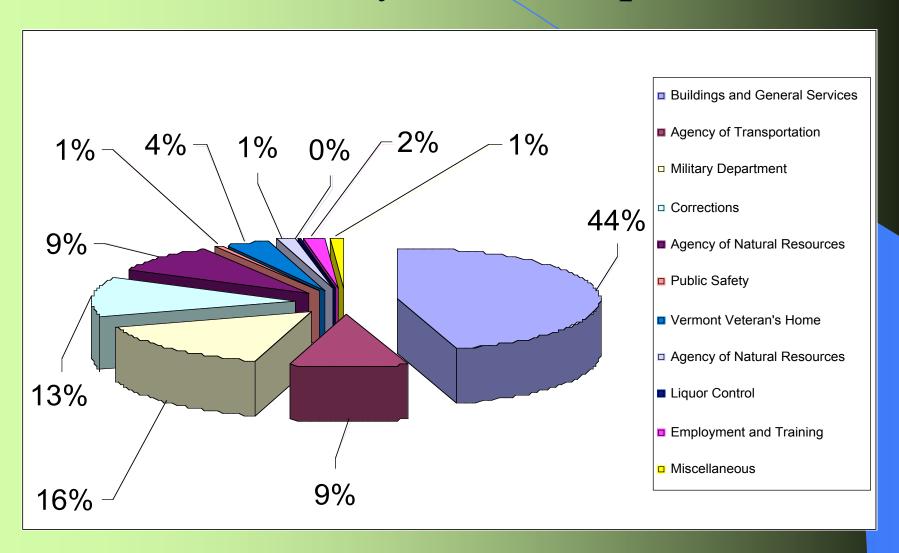
## Transportation Sector Fuel Costs by User Group

	Transportation Fuel Costs			
User Group	Gasoline	Diesel	<b>Total Cost</b>	Percent Total
<b>Buildings and General Services</b>	\$184,690	\$31,296	\$215,986	2%
Agency of Transportation	\$922,388	\$1,421,204	\$2,343,592	23%
Military Department	\$38,680	\$13,843	\$52,523	1%
Corrections	\$471,299	\$1,492	\$472,791	5%
Agency of Natural Resources	\$523,715	\$3,356	\$527,071	5%
Public Safety	\$937,263	\$752	\$938,014	9%
Vermont Veteran's Home	\$8,904	\$271	\$9,175	0%
Agency of Natural Resources	\$2,129,727	\$0	\$2,129,727	20%
Liquor Control	\$63,859	\$0	\$63,859	1%
<b>Employment and Training</b>	\$186,511	\$0	\$186,511	2%
Miscellaneous (includes reimb)	\$3,451,429	\$1,851	\$3,453,280	33%
Totals	\$8,918,465	\$1,474,065	\$10,392,530	100%

## Total Infrastructure Sector Energy Cost by User Group

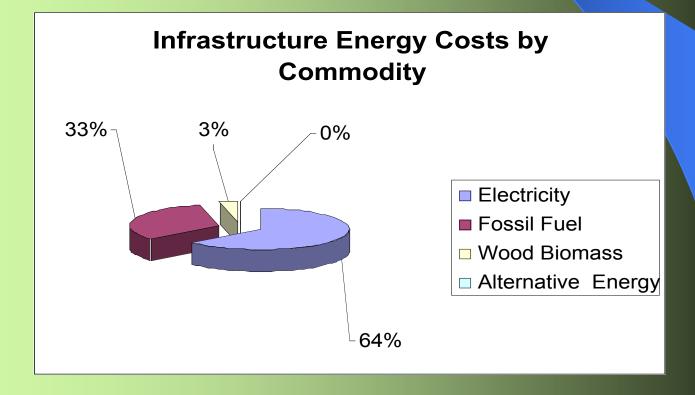
	Electricity	Building Fuel	Total Cost	Percent
Buildings and General Services	\$2,756,339	\$1,472,481	\$4,228,820	45%
Agency of Transportation	\$687,848	\$174,160	\$862,008	9%
Military Department	\$871,121	\$613,241	\$1,484,362	16%
Corrections	\$697,233	\$470,963	\$1,168,196	13%
Agency of Natural Resources	\$460,574	\$336,618	\$797,192	9%
Public Safety	\$46,179	\$6,488	\$52,667	1%
Vermont Veteran's Home	\$128,786	\$204,161	\$332,947	4%
Agency of Natural Resources	\$115,635	\$7,461	\$123,095	1%
Liquor Control	\$18,509	\$16,065	\$34,574	0%
Employment and Training	\$103,296	\$44,811	\$148,107	2%
Miscellaneous	\$86,595	\$22,969	\$109,565	1%
Totals	\$5,972,114	\$3,369,419	\$9,341,533	100%

## Total Infrastructure Sector Energy Cost by User Group



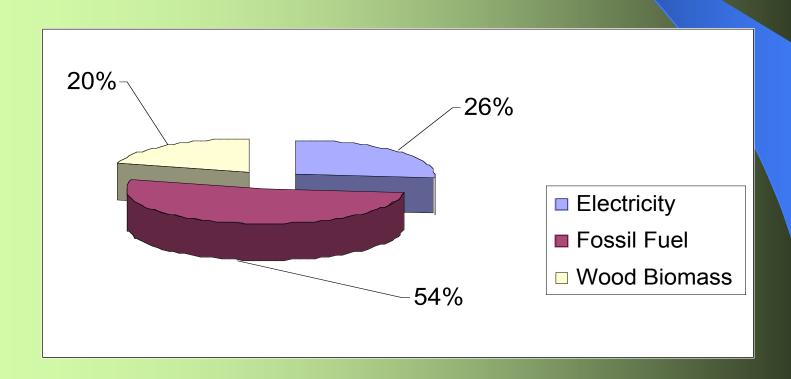
### Infrastructure Sector Cost by Commodity

Commodity	Costs	Percent
Electricity	\$5,972,114	64%
Fossil Fuel	\$3,052,944	33%
Wood Biomass	\$316,475	3%
Alternative Energy	\$0	0%
Total	\$9,341,533	100%



## Infrastructure Sector Energy Consumption by Commodity

Commodity	Energy in MMBTUs	Percent
Electricity	217,312	26%
Fossil Fuel	449,068	54%
Wood Biomass	165,277	20%
Total	831,657	100%



## Infrastructure Sector GHG Emissions by Commodity

Commodity	Tons of GHG Emissions	Percent
Electricity	37,248	52%
Fossil Fuel	34,521	48%
Wood Biomass	0	0%
Total	71,769	100%

